



# Who is watching the river?

*The largest sources of water pollution in Oregon aren't monitored well, if at all*

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The Clean Water Act of 1972 made it a lot harder for industrial facilities to dump large amounts of toxic materials into U.S. waterways with the institution of a permitting process with limits on toxic releases – it put a stop to many of the activities that led to Portland Harbor's designation as a EPA high-priority Superfund Site – but gray areas in the act and the limited nature of resources used to enforce it could leave the Willamette River and other waterways across Oregon susceptible to a slew of continued contamination long after the harbor is cleaned up.

Studies repeatedly show that Oregonians identify water quality as their top environmental priority, but Oregon Department of Environmental Quality (ODEQ) assessments conclude that many Oregon waterways are far below acceptable water quality standards. The Willamette and Columbia rivers both contain harmful levels of arsenic, dioxin and other chemicals and have above-normal temperatures.

While tests of water samples taken from Oregon rivers, including the Willamette, indicate industrial pollution has declined, industrial facilities that have obtained federal wastewater permits continue to legally release treated wastewater into Oregon rivers. While ODEQ is tasked with monitoring permit holders, almost all the oversight and reporting required to ensure the facility's wastewater doesn't exceed its toxicity limits is performed by the facility's staff. According to Burkhart, an ODEQ water quality inspector, his office performs on-site inspections of each permit-holding facility at a rate of once every two or five years, unless a facility is under enforcement action.

"A lot of people are surprised to find out that under the Clean Water Act, self-monitoring is a very big part of the program," says Burkhart. "There is no way the city, EPA or ODEQ has the resources to go out there once a week. We rely on self monitoring."

With official regulators lacking the resources necessary to visit facilities on a weekly basis, it's left to employees at each permit-holding facility, or a contractor hired by the facility, to collect the required weekly samples of wastewater for testing. In each case, the samples they collect are sent to an independent lab for testing. The lab sends the test results directly back to the facility from which the sample came. It's then up to a facility employee to summarize the lab report in a separate document, which he or she then signs and forwards to ODEQ. The original lab reports are kept on-site at the facility, and not sent to ODEQ. Upon its inspection every two or five years, ODEQ will conduct "quality control," says Burkhart, by randomly selecting certain entries to make sure the facility staff are conducting the sampling and summarizing correctly.

Burkhart says that if a facility staffer really wanted to manipulate the numbers in a lab report, they could, but his department knows the little things to look for. He says people have falsified reports in the past, but he believes it's a rare occurrence. "Usually we find they just weren't doing it right. Either using the wrong instruments or taking water from the wrong location," he says.

But if a staffer diluted a water sample on its way to the lab, the toxicity levels would come back much lower. Burkhart says, "It wouldn't be obvious if someone diluted a sample, but it would be a huge risk because they would probably go to jail. It happened more frequently in the past, but it's quite rare now."

According to Portland Harbor Community Advisory Committee Chair Jim Robison, "ODEQ has a limited amount of actual investigative work that they can do." He says they often rely on complaints submitted by private citizens and watchdog groups to know what to investigate.

Siltronic, located along the Willamette in Northwest Portland's industrial district, made headlines earlier this year when the EPA ranked it as the number one polluter of Oregon waterways in 2012 when it legally dumped more than 350,000 pounds of

nitrate compounds. That might seem like a lot, but it's just a drop in the bucket compared to the amount of nitrates released into waterways from agricultural sources, and these sites are receiving far less attention than Siltronic as they are barely monitored, if at all. High levels of nitrates in drinking water can cause serious health problems. According to 2011 a risk assessment of Oregon public water systems conducted by ODEQ, nitrate contamination is an ongoing problem that's "increasing in severity."

While industrial facilities are required to purchase wastewater and storm water permits under the Clean Water Act, no such permits exist for agricultural landowners. According to ODEQ inspector Robert Burkhart, before 1972, most pollutants were the result of industry wastewater, but today the bulk of pollutants in Oregon waterways come from

unpermitted and unmonitored sources like agricultural runoff, which can carry with it pesticides, herbicides, animal waste, fertilizers and even banned pesticides like DDT that bind to sediment and can fall off with erosion when bank-side (riparian) vegetation is removed.

In 1993, the Oregon State Legislature passed the Agricultural Water Quality Management Act, requiring the Oregon Department of Agriculture (ODA) establish a plan to prevent and control pollution from agricultural lands and achieve water quality standards. The departments plan aimed to educate farmers about the water quality program and standards and to control pollution, but that plan has fallen short.

According to Allison Hensey, Director of Sustainable Food and Farms at Oregon Environmental Council, "For the first 20 years of the program

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